	Application No.	Applicant(s)
	10/770,404	MIZUGAKI, ET AL.
Notice of Allowability	Examiner	Art Unit
	Gene N Auduong	2818
The MAILING DATE of this communication apperature All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI of the Office or upon petition by the applicant. See 37 CFR 1.313	ears on the cover sheet with (OR REMAINS) CLOSED in or other appropriate communication is su	this application. If not included nication will be mailed in due course. THIS
1. 🗵 This communication is responsive to application filed February	uary 4, 2004.	
2. The allowed claim(s) is/are <u>1-3</u> .		
3. \boxtimes The drawings filed on <u>04 February 2004</u> are accepted by the	ne Examiner.	•
 4. Acknowledgment is made of a claim for foreign priority ur a) All b) Some* c) None of the: 1. Certified copies of the priority documents have 2. Certified copies of the priority documents have 3. Copies of the certified copies of the priority documents have International Bureau (PCT Rule 17.2(a)). * Certified copies not received: 	e been received. e been recéived in Application	n No
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		a reply complying with the requirements
5. A SUBSTITUTE OATH OR DECLARATION must be subminformal PATENT APPLICATION (PTO-152) which give	itted. Note the attached EXA es reason(s) why the oath or	MINER'S AMENDMENT or NOTICE OF declaration is deficient.
6. CORRECTED DRAWINGS (as "replacement sheets") must (a) including changes required by the Notice of Draftspers 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Paper No./Mail Date ldentifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in the Toldand Proposition of the Deposit of and/or INFORMATION about the deposit attached Examiner's comment regarding REQUIREMENT.	son's Patent Drawing Review s Amendment / Comment or .84(c)) should be written on the header according to 37 CFF sit of BIOLOGICAL MATE	in the Office action of e drawings in the front (not the back) of R 1.121(d). RIAL must be submitted. Note the
 Attachment(s) 1. ☑ Notice of References Cited (PTO-892) 2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948) 3. ☑ Information Disclosure Statements (PTO-1449 or PTO/SB/O Paper No./Mail Date 02-04-04 4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material 	6. ☐ Interview Su Paper No./I 08), 7. ☐ Examiner's /	ormal Patent Application (PTO-152) Immary (PTO-413), Mail Date Amendment/Comment Statement of Reasons for Allowance Gene N Auduong Primary Examiner Art Unit 2818

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on February 4, 2004 is being considered by the examiner.

Allowable Subject Matter

- 3. Claims 1-3 are allowed.
- 4. The following is an examiner's statement of reasons for allowance: The prior art does not teach or fairly disclose a semiconductor memory device as claimed, comprising: an external access controller which outputs an external access execution timing signal for indicating an execution timing of an access operation to the memory cell array; and a refresh controller which outputs a refresh execution timing signal for indicating an execution timing of a refreshing operation to the memory cell array, wherein an output enable signal supplied from an external device changes to active in a read cycle; a latch signal changes to active and then inactive to indicate latching of a read signal which is read from the memory cell array; in the read cycle, the external access execution timing signal changes to active triggered by the change of the output enable signal to active; and changes to inactive triggered by a start of a latch of the read signal caused by changes of the latch signal to active and inactive; a refresh requirement signal changes to active to instruct an execution of the refreshing operation to the memory cell array; and in the read cycle, the refresh execution timing signal changes to active according to the change of the

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latch signal to active while the refresh requirement signal is active; and stays active for a predetermined time period.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gene N Auduong whose telephone number is (571) 272-1773.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Nelms can be reached on (571) 272-1787. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

GA

January 18, 2005

Gene N Auduong Primary Examiner Art Unit 2818